the origin of its branches, became suddenly smaller than natural, and on examination was discovered to be obliterated for five-eighths of an inch, beyond which it again assumed its normal size and appearance. The occlusion of the vessel seemed to have been the result of inflammation, the coats being thickened and indurated.

Dr. PARKER stated in conclusion that the operation for ligature of the subclavian had been performed in all eleven times by the following surgeons: I. Colles, in 1811, death occurring from hemorrhage on the fourth day; II. Mott, in 1833, death from hemorrhage on the eighteenth day; III. Hayden, in 1835, death from hemorrhage on the twelfth day; IV. O'Reilly, in 1836, death by hemorrhage on the twenty-third day; V. Partridge, in 1841, death from pericarditis and pleuritis on the fourth day; VI. and VII. Liston, in two cases—in the first, 1837, death occurred from hemorrhage on the thirteenth day, and in the second, 1839, death from the same cause on the thirty-sixth day; VIII. and IX. Auverte, in two cases; in both, death was the result of hemorrhage, in the first on the twenty-second, and in the second on the eleventh day. X. Rodgers' case, already referred to; XI. Lastly, Cuvellier, in 1860, death from hemorrhage on the tenth day—carotid and subclavian of right side ligatured.

Dr. BUCK remarked—A case invested with deeper interest than the one before us could scarcely be presented for our consideration. From the post-mortem dissection just described and the specimen exhibited, it appears that, notwithstanding the direct and reverse arterial currents had been intercepted by the ligatures applied to the subclavian, common carotid, and vertebral arteries, the success of the operation was defeated by the circulation still kept up in the aneurismal sac by means of the thyroid axis, internal mammary, and superior intercostal branches. The anastomoses of the terminal branches of the right inferior thyroid with those of the superior of the same side, and also of the internal mammary with the epigastric, must have afforded the channels for restoring and keeping up the circulation in the sac, and thus the formation of coagulum within its cavity has been prevented. Though the ligature upon the subclavian had completely divided the artery, leaving both ends open and exposed, the plug on the proximal side of the ligature had filled up the innominata, and closed it so impermeably as not to permit the passage of water injected at the root of the aorta. On the distal side of this ligature, however, the open mouth of the artery communicated immediately with the sac, and had furnished the repeated hemorrhages preceding death.

The question here suggests itself—Would the ligation of the thyroid axis, the internal mammary, and superior intercostal, in addition to the vertebral, have arrested all circulation in the aneurismal sac, and thus secured the conditions of success. It appears to me that it would have done so, and it is my firm conviction that this expedient ought to be tried, before we concede the impossibility of curing aneurism of the outer division of the subclavian artery by an operation.—*Am. Med. Times*, March 5, 1864.

Ligature of the Subclavian Artery.—Dr. ARMSBY, of Albany, has performed this operation on a healthy, robust man, 28 years of age, who had his right arm shattered by the accidental discharge of a cannon, July 7th, 1863.

Gangrene commenced on the second day, and on the third Dr. A. amputated near the shoulder. The stump healed kindly, and on the 12th day after the amputation he was able to go out, and soon after resumed his active business pursuits. His health remained good until September, when the stump began to swell and be painful, and on the 10th of November Dr. A. detected an aneurismal tumour; this tumour increased rapidly, elevating the bones of the shoulder, the pectoral muscles, and filling the axilla. The skin soon after gave way, and the patient lost by a sudden and rapid hemorrhage between two and three quarts of blood, causing faintness and almost loss of pulse. The opening was closed by compresses and adhesive plaster. The only chance of saving life seemed to be by ligation of the subclavian artery above the clavicle, which was performed by Dr. Armsby, on the 19th of November, 1863. The patient was placed on his back, with his face turned to the left. The first incision was about half an inch above and parallel with the superior border of the clavicle, extending from

the sterno-mastoid to the trapezius muscle; and exposing the superficial cervical fascia and the platysma myoides. The second incision was vertical, along the posterior border of the sterno-mastoid, intersecting the first at the margin of this muscle. In elevating the superficial fascia and the platysma myoides, it became necessary to apply a ligature to the external jugular vein, and divide it, as it could not be sufficiently retracted without danger of laceration. Three branches of the supra-scapular and deep cervical arteries bled profusely, and required ligatures. The clavicular attachment of the sterno-mastoid was unusually broad, and one half of it had to be divided to reach the scalenus-anticus, at its attachment to the rib. The deep cervical artery was held upward; the supra-scapular artery and the subclavian vein carefully depressed; and the great subclavian artery fully exposed as it emerged from between the scaleni muscles. In separating the artery from the great veins, which covered and inclosed it, a slight gurgling sound occurred, as if air was entering the circulation. This was a moment of intense anxiety, as such an accident might have been instantly fatal. A bit of sponge was pressed against the part, and as no constitutional disturbance followed, the operation proceeded. The artery was found in a healthy state, and the ligature was cast around it by the aneurismal needle of Mott. The situation of the artery was unusually deep, from the elevated position of the shoulder, by the tumour, but every person present had a distinct view of it before the ligature was tied.

The chief difficulties and dangers of the operation consisted in the following circumstances: The great size of the tumour, thrusting upward the bones of the shoulder; the distension of the surrounding parts; the great size of the veins, which covered and enveloped the artery; the large nerves of the axillary plexus, liable to be included in the ligature; and the danger of the introduction of air into the circulation. The pulsation in the tumour ceased as soon as the ligature was drawn, and the patient improved rapidly under the use of tonics. The sac gradually diminished, until the nineteenth day after the operation, when it became more painful, and the skin, or a portion of it, gave indications of sloughing. Dr. Armsby was again sent for, who opened the sac, and removed nearly a quart of coagulated blood and fibrinous matter.

The case has progressed favourably; the ligature came away on the twenty-ninth day, and the recovery has been rapid and complete, as far as the operation is concerned. There is a slight discharge of watery matter from the sac, which is gradually diminishing.—*Boston Med. and Surg. Journ.*, Feb. 4, 1864.

Ligature of the Common Iliac Artery.—Prof. BRAINARD reports (*Chicago Medical Journal*, March, 1864) the following case in which he performed this operation: April 9th, 1863, called to visit Col. Scott, 19th Illinois Vols., who was wounded at the battle of Stone River. A musket-ball had passed from before backwards through the thigh, entering below the pelvis and at the outside of the femoral artery, grazing the inside of the femur, and coming out of the buttock.

At the time of the accident, there was hemorrhage, which was controlled, as was supposed, by pressure on the femoral artery. The compression was continued about three weeks, during which time no hemorrhage occurred. The wound suppurated and some small scales of bone came out at each orifice of the wound.

He was removed to his home in Chicago, and did well, although the wound remained open behind, until about the 5th of April, three weeks after the accident, when a small tumour formed in front, which was opened. A day or two after, a hemorrhage took place from both openings. It was on account of this that my advice was asked. On the night of the 9th, at 11 o'clock, a copious hemorrhage renewed, which was controlled in a measure, but continued at intervals during the night.

10*th*. Saw him at 10 o'clock, and applied the compressor over the femoral artery. This seemed to arrest the bleeding, but in about two hours it returned.

The bleeding had been so great as to threaten death, and I determined to tie the external iliac artery, not doubting from the history of the case that the hemorrhage was from branches of the profunda femoris close to its origin.